

PHOENIX PRODUCTION COMPANY

225 WEST YELLOWSTONE AVE. ■ P.O. BOX 2653 ■ CODY, WYOMING 82414 ■ 307-587-6440 ■ FAX 307-587-6450

VIA CERTIFIED MAIL—RETURN RECEIPT

September 23, 2013 Attn: Mr. Bruce Kent U.S. EPA, Region VIII 1595 Wynkoop Street Denver, CO 80202-1129 RECEIVED

SEP 26 2013

Wastewater Unit

Re: NPDES Permit WY-0024945 and WY-0024953; Rolff Lake and Sheldon Dome

Dear Mr. Kent:

With respect to our last letter regarding a change in production chemical vendors; in addition to production chemicals supplied by Champion Technologies, listed in our last letter dated 09/11/2013, below are two (2) other production chemicals part of the field inventory. These are utilized on a less than routine basis and hence, there was an inadvertent oversight in not reporting them in the 09/11 letter. Attached are Material Safety Data Sheets (MSDS) with further details.

Vendor	Material Name
Champion Technologies	Bactron K-31W
Champion Technologies	Surfatron DQ-76

Thank you for your assistance with your surface water discharge system. Please feel free to contact me with any questions you may have.

Sincerely,

BREITBURN

Joshua Black

Engineering Technician and Regulatory Specialist

© Office: 307.587.6440 xt 220 © Cell: 307.250.6103

Email: joshua.black@breitburn.com



Eff. Date: 05/06/2011

Ver: 3.0

Material Safety Data Sheet Surfatron® DQ-76

1. PRODUCT AND COMPANY IDENTIFICATION

Product name

Surfatron® DQ-76

Product use

Surfactant

Manufacturer

Champion Technologies, Inc.

P.O. Box 450499 Houston, TX, 77245

USA

Telephone

1-281-431-2561 (Champion)

In case of emergency

1-800-424-9300 (CHEMTREC)

1-703-527-3887 (CHEMTREC - International)

2. HAZARDS IDENTIFICATION

Physical state

liquid

Color

Green. yellow.

Odor

sharp, acrid

Emergency overview

DANGER!

Toxic. Corrosive. Not considered to be flammable.

Potential health effects

Inhalation

May give off gas, vapor or dust that is very irritating or corrosive to the respiratory

system.

Ingestion

May cause burns to mouth, throat and stomach.

Skin

Corrosive to the skin. Causes burns.

Eyes

Causes severe burns.

Chronic effects

No known significant effects or critical hazards.

See toxicological information (section 11)

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Name</u>	<u>CAS no.</u>	Weight %
Sodium hypochlorite	7681-52-9 1310-73-2	10 - 30 1 - 5
Sodium Hydroxide	1310-73-2	

4. FIRST AID MEASURES

Eye contact Get medical attention immediately. Immediately flush eyes with plenty of water, occasionally

lifting the upper and lower eyelids. Check for and remove any contact lenses. Chemical

burns must be treated promptly by a physician.

Skin contact Get medical attention immediately. Flush contaminated skin with plenty of water. Remove

contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Chemical burns

must be treated promptly by a physician.

Inhalation Get medical attention immediately. Move exposed person to fresh air. If not breathing, if

breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by

trained personnel. If unconscious, place in recovery position and get medical attention

immediately. Maintain an open airway.

Ingestion

Get medical attention immediately. Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Notes to physician

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. FIRE-FIGHTING MEASURES

Flash point

> 200 °F (> 93.3 °C)

Flammability of the product

In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media

Suitable

Use an extinguishing agent suitable for the surrounding fire.

Special exposure hazards

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Hazardous combustion products

halogenated compounds, metal oxide/oxides

Special protective equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Special remarks on fire hazards

Not available.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental precautions

Avoid contact of spilled material with soil and prevent runoff entering surface waterways. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up

Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Spilled material may need to be neutralized before collection begins. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. HANDLING AND STORAGE

Handling

Put on appropriate personal protective equipment (see section 8). If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container. Workers should wash hands and face before eating, drinking and smoking.

Storage

Store in accordance with local regulations. Keep container in a well-ventilated area. Store in the original container or an approved alternative made from a compatible material. Keep tightly closed when not in use. Separate from acids. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protection

Hands

Use chemical-resistant, impervious gloves.

Eyes

Goggles, face shield or other full-face protection should be worn if there is a risk of direct

exposure to aerosols or splashes.

Body

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory

If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Occupational exposure limits

Component	Source	Type	<u>PPM</u>	MG/M3	<u>Notes</u>
Sodium hypochlorite	AIHA WEEL	STEL		2 mg/m3	
Sodium Hydroxide	OSHA PEL NIOSH REL ACGIH TLV	TWA CEIL CEIL		2 mg/m3 2 mg/m3 2 mg/m3	

Engineering measures

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Engineering controls may be required to control the primary or secondary risks associated with this product.

Hygiene measures Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reusing. Emergency baths, showers, or other equipment appropriate for the potential level of exposure should be located close to the workstation location.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state

liquid

Color

Green. yellow.

Odor

sharp, acrid

Odor threshold

Not available.

Boiling/condensation point

212 °F (100.0 °C)

Pour point

Not available.

Flash point

> 200 °F (> 93.3 °C)

Flammable limits

Lower: Not available. Upper: Not available.

Auto-ignition temperature

Not available.

рΗ

> 11.0, Method (neat)

Evaporation rate

Not available.

Solubility

Water

Vapor density

Not available.

Relative density

1.08 - 1.26

Vapor pressure

Not available.

Viscosity

Dynamic: Not available.

Octanol/water partition

Not available.

coefficient (LogPow)

Note: Typical values only - not to be interpreted as sales specifications

10. STABILITY AND REACTIVITY

Stability

The product is stable.

Hazardous polymerization

Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to avoid

No specific data.

Materials to avoid

acids

Hazardous

Contact with acids liberates toxic gas.

decomposition

products

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Substance	Test type	Species	<u>Dose</u>
Sodium hypochlorite	LD50 Oral LC50 Inhalation LD50 Dermal	Rat Rat Rabbit	8,200 mg/kg > 10.5 mg/l 1,350 mg/kg
Sodium Hydroxide	LD50 Oral	Rat	500 mg/kg

Irritation/Corrosion

No data available for the product itself.

Carcinogenicity

None of the components are listed.

12. ECOLOGICAL INFORMATION

Environmental effects

No known significant effects or critical hazards.

Other adverse effects

None known.

13. DISPOSAL CONSIDERATIONS

Waste disposal

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. TRANSPORT INFORMATION

Refer to the bill of lading or container label for DOT or other transportation hazard classification. Additionally, be aware that shipping descriptions may vary based on mode of transport, shipment volume or weight, container size or type, and/or origin and destination. Consult your company's Hazardous Materials / Dangerous Goods expert or your legal counsel for information specific to your situation.

15. REGULATORY INFORMATION

HCS Classification

Component

n Hydroxide

Sodium Hydroxide Sodium hypochlorite Classification

Corrosive, Occupational exposure limits

Toxic., Corrosive, Occupational exposure limits

U.S. Federal regulations

CERCLA: Hazardous substances - Reportable quantity:

Substance

Reportable quantity

Sodium hypochlorite

100 lbs

Sodium Hydroxide

1000 lbs

Product Reportable quantity

<u>Substance</u>

909 lb / 92 gal US

Sodium hypochlorite

Product spills equal to or exceeding the threshold above trigger the reporting requirements under CERCLA for the listed hazardous substance. Report the spill or release to the National Response Center (NRC) at (800) 424-8802.

SARA Title III Section 302 Extremely hazardous substances (40 CFR Part 355):

None of the components are listed.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification:

Immediate (acute) health hazard. Reactivity.

SARA 313 - Supplier notification

None of the components are listed.

Clean Water Act (CWA) 307:

None of the components are listed.

Clean Water Act (CWA) 311:

The following components are listed: Sodium hypochlorite. Sodium Hydroxide.

Clean Air Act (CAA) 112 accidental release prevention:

None of the components are listed.

Clean Air Act (CAA) 112 regulated flammable substances:

None of the components are listed.

Clean Air Act (CAA) 112 regulated toxic substances:

None of the components are listed.

State regulations

Massachusetts Substances: The following components are listed: Sodium hypochlorite. Sodium Hydroxide.

New Jersey Hazardous Substances: The following components are listed: Sodium Hydroxide. Sodium hypochlorite.

Pennsylvania RTK Hazardous Substances: The following components are listed: Sodium Hydroxide. Sodium hypochlorite.

California Prop. 65

Not available.

International regulations

United States inventory (TSCA 8b):

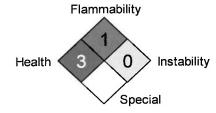
All components are listed or exempted.

Canada inventory (DSL):

All components are listed or exempted.

16. OTHER INFORMATION

National Fire Protection Association (U.S.A.):



Prepared by

Product Stewardship (1-281-431-2561)

Date of issue

05/06/2011

Date of previous issue

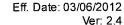
12/03/2007

Version

3.0

Disclaimer

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.





Material Safety Data Sheet Bactron® K-31W Antimicrobial

1. PRODUCT AND COMPANY IDENTIFICATION

Product name

Bactron® K-31W Antimicrobial

Product use

Biocide

Manufacturer

Champion Technologies, Inc.

P.O. Box 450499 Houston, TX, 77245

USA

Telephone

1-281-431-2561 (Champion)

In case of emergency

1-800-424-9300 (CHEMTREC)

1-703-527-3887 (CHEMTREC - International)

2. HAZARDS IDENTIFICATION

Physical state

liquid

Color

Clear. colorless.

Odor

sharp, pungent

Emergency overview

DANGER!

Corrosive. Combustible. Harmful. Keep away from heat, sparks and flame. May

cause sensitization by inhalation and skin contact.

Potential health effects

Inhalation

Harmful by inhalation. May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. May cause sensitization by inhalation.

Ingestion

Harmful if swallowed. May cause burns to mouth, throat and stomach.

Skin

Corrosive to the skin. Causes burns. May cause sensitization by skin contact.

Eves

Corrosive to eyes. Causes burns.

Chronic effects

Once sensitized, a severe allergic reaction may occur when subsequently exposed

to very low levels.

See toxicological information (section 11)

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Name</u>	CAS no.	Weight %
Ethylene Glycol	107-21-1	10 - 30
Glutaraldehyde	111-30-8	10 - 30
Ethanol	64-17-5	10 - 30

4. FIRST AID MEASURES

Eye contact

Get medical attention immediately. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Chemical

burns must be treated promptly by a physician.

Skin contact

Get medical attention immediately. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid

further exposure.

Bactron® K-31W Antimicrobial Eff. Date: 03/06/2012

Get medical attention immediately. Move exposed person to fresh air. If not breathing, if Inhalation

breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. In the event of any complaints or symptoms, avoid

further exposure.

Get medical attention immediately. Wash out mouth with water. If material has been Ingestion

swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or selfcontained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Notes to physician No specific treatment. Treat symptomatically. Contact poison treatment specialist

immediately if large quantities have been ingested or inhaled.

5. FIRE-FIGHTING MEASURES

100.9 °F (38.3 °C), Pensky-Martens. Closed cup Flash point

Flammability of the product

Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Extinguishing media

Suitable

Use dry chemical, CO2, water spray (fog) or foam.

Not suitable

Do not use water jet.

Special exposure hazards

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-

exposed containers cool.

Hazardous combustion products

carbon dioxide, carbon monoxide

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Special remarks on fire hazards

Not available.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental precautions

Avoid contact of spilled material with soil and prevent runoff entering surface waterways. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up

Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. HANDLING AND STORAGE

Handling

Use only with adequate ventilation. Put on appropriate personal protective equipment (see section 8). Wear appropriate respirator when ventilation is inadequate. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not enter storage areas and confined spaces unless adequately ventilated. Eliminate all ignition sources. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container. Workers should wash hands and face before eating, drinking and smoking.

Storage

Store in accordance with local regulations. Store in a segregated and approved area. Keep container in a well-ventilated area. Store in the original container or an approved alternative made from a compatible material. Keep tightly closed when not in use. Separate from oxidizing materials. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protection

Hands Use chemical-resistant, impervious gloves.

Eyes Goggles, face shield or other full-face protection should be worn if there is a risk of direct

exposure to aerosols or splashes.

Body Personal protective equipment for the body should be selected based on the task being

performed and the risks involved and should be approved by a specialist before handling this

product.

Respiratory

If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Occupational exposure limits

Component	Source	Type	<u>PPM</u>	MG/M3	<u>Notes</u>
Ethylene Glycol	NIOSH REL ACGIH TLV	CEIL		100 mg/m3	
Glutaraldehyde	NIOSH REL ACGIH TLV	CEIL CEIL	0.2 ppm 0.05 ppm	0.8 mg/m3	
Ethanol	OSHA PEL	TWA	1,000 ppm	1,900 mg/m3	

NIOSH REL ACGIH TLV TWA TWA 1,000 ppm 1,000 ppm 1,900 mg/m3 1,880 mg/m3

Engineering measures

measures

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reusing. Emergency baths, showers, or other equipment appropriate for the potential level of exposure should be located close to the workstation location.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state

liquid

Color

Clear. colorless.

Odor

sharp, pungent

Odor threshold

Not available.

Boiling/condensation point

Not available.

Pour point

-40 °F (-40.0 °C)

Flash point

100.9 °F (38.3 °C), Pensky-Martens. Closed cup

Flammable limits

Lower: Not available.

Upper: Not available.

Auto-ignition temperature

Not available.

рΗ

3.0 - 4.5, Method (neat)

Evaporation rate

Not available.

Solubility

Water

Vapor density

Not available.

Relative density

1.0449 - 1.0750 @ 68 °F (20.0 °C)

Vapor pressure

5.171 mmHg @ 100 °F (37.8 °C)

Viscosity

Dynamic: 4 - 8 cPs

Octanol/water partition coefficient (LogPow)

Not available.

Note: Typical values only - not to be interpreted as sales specifications

10. STABILITY AND REACTIVITY

Stability

The product is stable.

Hazardous polymerization

Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to avoid

Avoid all possible sources of ignition (spark or flame).

Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or

sources of ignition.

Page 4 of 7

Materials to avoid

oxidizing materials

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

11. TOXICOLOGICAL INFORMATION

Acute toxicity			
Substance	Test type	<u>Species</u>	Dose
Ethylene Glycol			
	LD50 Oral	Rat	4,700 mg/kg
	LD50 Oral	Mouse	5,500 mg/kg
	LD50 Oral	Guinea pig	6,610 mg/kg
	LC50 Inhalation	Rat	> 200 mg/l
Glutaraldehyde			
•	LD50 Oral	Mouse	100 mg/kg
	LD50 Oral	Rat	134 mg/kg
	LC50 Inhalation	Rat	480 mg/l
	LD50 Dermal	Rat	> 2,500 mg/kg
Ethanol			
	LD50 Oral	Mouse	3,450 mg/kg
	LD50 Oral	Guinea pig	5,560 mg/kg
	LD50 Oral	Rabbit	6,300 mg/kg
	LD50 Oral	Rat	7,060 mg/kg
	LC50 Inhalation	Rat	37,685 mg/l

Irritation/Corrosion

No data available for the product itself.

Target organ effects

Ethylene Glycol: May cause kidney damage.

Carcinogenicity

None of the components are listed.

12. ECOLOGICAL INFORMATION

Environmental effects

No known significant effects or critical hazards.

Other adverse effects

None known.

13. DISPOSAL CONSIDERATIONS

Waste disposal

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. TRANSPORT INFORMATION

Refer to the bill of lading or container label for DOT or other transportation hazard classification. Additionally, be aware that shipping descriptions may vary based on mode of transport, shipment volume or weight, container size or type, and/or origin and destination. Consult your company's Hazardous Materials / Dangerous Goods expert or your legal counsel for information specific to your situation.

15. REGULATORY INFORMATION

HCS Classification

Component

Classification

Ethanol

Occupational exposure limits

Glutaraldehyde Ethylene Glycol Toxic., Corrosive, Sensitizer, Occupational exposure limits

Harmful., Occupational exposure limits

U.S. Federal regulations

CERCLA: Hazardous substances - Reportable quantity:

Substance

Reportable quantity

Ethylene Glycol

5000 lbs

Product Reportable quantity

Substance

18,181 lb / 2,060 gal US

Ethylene Glycol

Product spills equal to or exceeding the threshold above trigger the reporting requirements under CERCLA for the listed hazardous substance. Report the spill or release to the National Response Center (NRC) at (800) 424-8802.

SARA Title III Section 302 Extremely hazardous substances (40 CFR Part 355):

None of the components are listed.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification:

Immediate (acute) health hazard. Delayed (chronic) health hazard. Fire hazard.

SARA 313 - Supplier notification

Component

CAS no.

Weight %

Ethylene Glycol

107-21-1

10 - 30

Clean Water Act (CWA) 307:

None of the components are listed.

Clean Water Act (CWA) 311:

None of the components are listed.

Clean Air Act (CAA) 112 accidental release prevention:

None of the components are listed.

Clean Air Act (CAA) 112 regulated flammable substances:

None of the components are listed.

Clean Air Act (CAA) 112 regulated toxic substances:

None of the components are listed.

State regulations

Massachusetts Substances: The following components are listed: Ethylene Glycol. Glutaraldehyde. Ethanol.

New Jersey Hazardous Substances: The following components are listed: Ethanol. Glutaraldehyde. Ethylene Glycol.

Pennsylvania RTK Hazardous Substances: The following components are listed: Ethanol. Glutaraldehyde. Ethylene Glycol.

California Prop. 65

Not available.

International regulations

United States inventory (TSCA 8b):

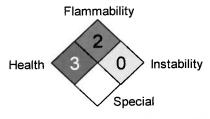
All components are listed or exempted.

Canada inventory (DSL):

All components are listed or exempted.

16. OTHER INFORMATION

National Fire Protection Association (U.S.A.):



Prepared by

Product Stewardship (1-281-431-2561)

Date of issue

03/06/2012

Date of previous issue

01/20/2011

Version

2.4

Disclaimer

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.